

Remarks

Claims 72-85 are pending in the subject application. Applicants acknowledge that claims 73 and 76-85 have been withdrawn from further consideration as being drawn to a non-elected invention. By this Amendment, Applicants have canceled claims 73 and 76-85, amended claims 72, and added new claims 86-109. Support for the amendments and new claims can be found throughout the subject specification and in the claims as originally filed (see, for example, page 5, line 11 through page 9, line 18 and page 11, lines 1 through 36). Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 72, 74, 75, and 86-109 are currently before the Examiner, with claims 72 and 91 being generic. Claims 72, 74, 75, 90, 91, 93, 98, and 106 read on the elected invention. Favorable consideration of the pending claims is respectfully requested.

As an initial matter, Applicants note that the Office Action mailed December 27, 2004 does not indicate that the Examiner considered Applicants' Information Disclosure Statement that was filed in this application. Accordingly, Applicants respectfully request that the Examiner make of record the Information Disclosure Statements submitted to the Patent Office on March 2 and March 23, 1999 in the subject application. Applicants further note that an initial Information Disclosure Statement (IDS) was mailed to the Patent Office on May 31, 2002 requesting that the references cited in the parent application (Serial No. 09/485,316) be made of record in the subject application. Although the Office Action Summary page did indicate receipt and consideration of the Supplemental IDS and Second Supplemental IDS mailed April 26, 2004 and October 14, 2004, respectively, Applicants note that the Form PTO-1449 for the IDS dated May 31, 2002 was not initialed and returned with the outstanding Action for the subject application. A copy of the IDS dated May 31, 2002 is enclosed with this Amendment. Applicants respectfully request that the IDS be considered and made of record in the next Official Communication in the subject application.

Applicants have amended the "Related Applications" section of the subject specification to indicate that the parent U.S. application Serial No. 09/485,316 is now U.S. Patent No. 6,344,441. Applicants gratefully acknowledge the Examiner's helpful review of the subject specification. Accordingly, reconsideration and withdrawal of the objection is respectfully requested.

Applicants note that the trademark “SUPERScript” was capitalized on page 25 of the subject specification and did not contain the “trademark” symbol afterwards. Therefore, an amendment was not made to the trademark “SUPERScript”; however, the trademark “Anti-Express” was not capitalized and did contain the “trademark” symbol afterwards. The subject application has been amended in order to properly cite trademarks for “ANTI-EXPRESS” and “MATCHMAKER.” Accordingly, reconsideration and withdrawal of the objection is respectfully requested.

Claims 72, 74, and 75 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Applicants assert that the claims are definite and the use of the term “influences” is definite as the subject specification discusses both increasing and decreasing the partitioning of lipids to the liver (see page 7, line 5 through page 8, line 3). However, in order to expedite prosecution of this matter, Applicants have amended claim 72 to recite “increases.”

In regard to the second aspect of the rejection, the Examiner has argued that AdipoQ, ApM1, and Acrp30 refer to the same protein on the basis of an article published in 2004. However, from the description of the subject application, it is clear in that the three proteins, though related, are not identical. For instance, the description on page 9, lines 13-18, mentions the Genbank accession numbers for ApM1, AdipoQ, and Acrp30. Attached with this Amendment is a printout of the information that is available under these Genbank accession numbers, including the sequences. An alignment of the sequences is also provided. As evident from this information AdipoQ and Acrp30 are murine sequences while ApM1 is a human sequence. Applicants also direct the Examiner’s attention to Table 1 on page 17 of the subject application showing that Acrp30 is 81.1% homologous to ApM1, and AdipoQ is 80.6% homologous to ApM1. Therefore, on the basis of the subject application as filed, it is clear that AdipoQ, ApM1, and Acrp30 are closely related, but distinct proteins. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, is respectfully requested.

Claims 72, 74, and 75 are rejected under 35 U.S.C. § 112, first paragraph, as non-enabled by the subject specification. The Office Action indicates that the claimed invention is enabled for methods of administering ApM1 to reduce plasma triglyceride levels or to reduce body weight but it is not enabled for methods of administering any agent which influences the partitioning of dietary

lipids between the liver and peripheral tissues, ApM1, or fragments thereof to treat microangiopathic lesions, ocular lesions, or renal lesions resulting from obesity-related type II diabetes. Applicants respectfully traverse.

It is respectfully submitted that the disorders recited in the claims are “obesity-related.” The Office Action has acknowledged that the claims are enabled for the use of at least ApM1 for treatment of obesity/reduction of body weight and Applicants submit that if the underlying cause for the claimed diseases, namely obesity, is removed or reduced, obesity-related disorders are treated as well.

Attached with this Amendment is an article by Kondo *et al.* (*Diabetes* 51, p. 2325, 2002) which confirms the role of AdipoQ/Acrp30 in type II diabetes and insulin resistance. Kondo *et al.* have identified four missense mutations in the globular domain of AdipoQ in diabetic patients. All subjects having the I164T mutation showed some feature of metabolic syndrome, including hypertension, hyperlipidemia, diabetes, and atherosclerosis. A further article confirms the role of adiponectin (AdipoQ/Acrp30) in obesity, diabetes type II and related diseases. The attached review by Diez and Iglesias (*Eur. J. Endocrinology*, Vol. 148, p. 293, 2003) also confirms the protective role of AdipoQ in experimental models of vascular injury. Applicants claim treatment of microangiopathic lesions and ocular lesions in obese individuals with type II diabetes, these lesions being “vascular injury.” Thus, it is respectfully submitted that these articles fully support the assertions made in the as-filed application with respect to conditions that are suitable for treatment in accordance with the claimed inventions (*see In re Marzocchi*, 439 F.2d 220, 223 n.4, 169 U.S.P.Q. 367, 370 n.4 (C.C.P.A. 1971) later published references or other evidence may be used to demonstrate the accuracy or objective truth of statements made in the application as filed). Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

It should be understood that the amendments presented herein have been made solely to expedite prosecution of the subject application to completion and should not be construed as an indication of Applicants’ agreement with or acquiescence in the Examiner’s position. Applicants expressly reserve the right to pursue the invention(s) disclosed in the subject application, including

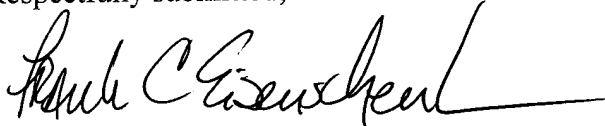
any subject matter canceled or not pursued during prosecution of the subject application, in a related application.

In view of the foregoing remarks and amendments to the claims, Applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

Applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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Attachments: Copy of Information Disclosure Statement dated May 31, 2002

Copy of Kondo *et al.* reference

Copy of Diez and Iglesias reference

Copy of Genbank accession numbers, including the sequences and alignment